

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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DOC #: APR 02 2012  
DATE FILED:

REALTIME DATA, LLC d/b/a IXO, : X  
Plaintiff, : 11 Civ. 6696 (KBF)  
: 11 Civ. 6701 (KBF)  
: 11 Civ. 6704 (KBF)

-v- :  
:  
MORGAN STANLEY, et al., :  
:  
Defendants. :  
----- X  
REALTIME DATA, LLC d/b/a IXO, :  
Plaintiff, : 11 Civ. 6697 (KBF)  
: 11 Civ. 6699 (KBF)  
: 11 Civ. 6702 (KBF)

-v- :  
:  
CME GROUP INC., et al. :  
:  
Defendants. :  
----- X  
REALTIME DATA, LLC d/b/a IXO, :  
Plaintiff, : 11 Civ. 6698 (KBF)  
: 11 Civ. 6700 (KBF)  
: 11 Civ. 6703 (KBF)

-v- :  
:  
THOMSON REUTERS, et al. :  
:  
Defendants. :  
----- X  
KATHERINE B. FORREST, District Judge:

KATHERINE B. FORREST, District Judge:

Having reviewed the parties' letters of March 27, 2012 and March 29, 2012 (attached hereto) regarding the scope of discovery, it is hereby ORDERED that:

1. At present, discovery is limited to evidence relating to the FAST protocol. If and when there is further

development as to the relevance of other compression protocols, the Court will consider revising the scope of discovery at that time upon an appropriate application.

2. Plaintiff may also, at a later date, renew an application for a significantly narrowed set of requests limited to discovery for damages.

SO ORDERED.

Dated: New York, New York  
April 2, 2012

K. B. Forrest

KATHERINE B. FORREST  
United States District Judge

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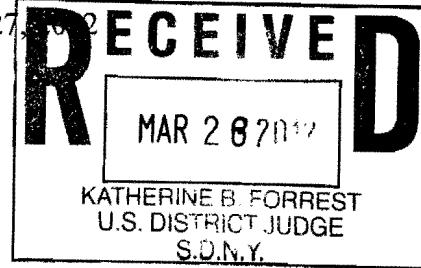
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March 27, 2012

Hon. Katherine B. Forrest  
United States District Court  
Southern District of New York  
500 Pearl St.  
New York, NY 10007-1312



RE: *Realtime Data, LLC v. Morgan Stanley, et al.*, Consolidated Case  
Nos. 1:11-cv-6696, -6701, -6704 (S.D. N.Y.)

Dear Judge Forrest:

Pursuant to Your Honor's Individual Practice Rule 2.F and Local Civil Rule 37.2, we write on behalf of certain Bank Defendants, Morgan Stanley, Morgan Stanley & Co. Incorporated, The Goldman Sachs Group, Inc., Goldman, Sachs & Co., Goldman Sachs Execution & Clearing, L.P., J.P. Morgan Chase & Co., J.P. Morgan Securities, Inc. and J.P. Morgan Clearing Corp. (collectively, "Defendants"), in the above-captioned actions. Defendants respectfully request an informal conference with the Court to seek leave to file a motion for a narrow protective order pursuant to Fed. R. Civ. P. 26(c) to limit Realtime's discovery to its proper scope – the technologies and systems actually relevant to its infringement claims – and to prevent Realtime from undertaking a fishing expedition into other irrelevant aspects of Defendants' operations, particularly their highly proprietary and commercially sensitive trading algorithms and trading systems. The discovery sought goes to the heart of some of the most important and competitively sensitive aspects of Defendants' business operations. Indeed, this information is so sensitive it is available only to select employees.

As an initial matter, Defendants want to be perfectly clear about the narrow scope of their protective order request. Although the parties may have separate disagreements about other aspects of discovery, such as the parties' interrogatories, Defendants' present request for a protective order is an entirely distinct and narrow issue of critical importance to Defendants. Defendants have provided and remain fully committed to provide Realtime with all reasonably necessary discovery germane to Realtime's allegations.

However, Realtime recently served discovery requests seeking detailed information regarding Defendants' proprietary trading algorithms and trading systems that only receive and process uncompressed financial market data and, therefore, have no legitimate relevance to Realtime's infringement allegations – the compression and decompression of financial market data using the alleged standard FIX Adapted for STreaming (FAST) protocol – or to any tenable damages theory. FAST is a communications protocol that is sometimes used to compress market

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data prior to transmission, such as certain quote and pricing data transmitted by some securities and options exchanges to Defendants over various transmission lines. That is the focus of Realtime's allegations, infringement contentions, and their patents: the compression and decompression of data. Trading algorithms do not compress or decompress data using the FAST protocol, and in fact, Realtime has never alleged that they do so.

Consistent with this understanding, Realtime has repeatedly represented to Defendants and this Court (including at the March 16, 2012, status conference) that its patents and infringement contentions in this action relate to the FAST protocol for transmitting compressed market data and receiving and decompressing the transmitted data. Realtime's counsel explicitly represented to this Court earlier this month that the only source code it needed was for encoding or decoding the market data feeds using the FAST. *See* 3/16/12 Hrg. Tr. at 39:11-15 ("[W]e are only accusing what we say are FAST, and that stands for a standard, compliant source code for encoding or decoding the market feeds. That is all we are looking for. That is what we are charting up and all we are looking for to get to the source code."); *see also* 12/9/11 Hrg. Tr. at 4:8-13, 7:4-5, 10:24-25 ("[T]his is not a complex case. It is about a standard FAST"). Significantly, in opposing a stay of these cases, Realtime explicitly represented to this Court at a status hearing on December 9, 2011, that the only remaining discovery it needed was in response to its previously-served interrogatories and Rule 30(b)(6) deposition topics. *See* 12/9/11 Hrg. Tr. 8:2-22.

Despite representing that its prior discovery requests were adequate, Realtime has done an about-face and propounded significant additional discovery, including more than a dozen additional deposition topics and requests for production, that extend well beyond the systems that actually compress or decompress market data using the FAST protocol. Realtime's recent requests now seek probing, detailed, technical discovery into a multitude of Defendants' trading algorithms that have no connection to the FAST protocol other than that they use market data—albeit data that already has been decompressed before it is processed by such algorithms.

Despite repeatedly explaining to Realtime that such overbroad and burdensome discovery requests have no relevance to this action, Realtime has continued to pursue them. The parties had a telephonic meet and confer on March 23, 2012, and it is clear that they are at an impasse. Indeed, Realtime's counsel stated that it now expects Defendants to disclose the actual trading algorithms themselves, even though Realtime has never disputed that none of those algorithms process data in the FAST format.

During the meet and confer, Realtime attempted to justify its newly propounded discovery requests by arguing that they are somehow related to a damages theory, which it now apparently attempts to pursue, to the effect that because Defendants' trading algorithms use data that was originally compressed and decompressed at the front end of their data transmission networks, Realtime is entitled to a percentage of the profits generated by the trading systems whose algorithms use only uncompressed data and have nothing to do with the subject matter of Realtime's patents. Ironically, Realtime has steadfastly refused to disclose its damages theory throughout this case either in its interrogatory responses or in its required Fed. R. Civ. P. 26(a)(1)(iii) disclosure. However, in a letter dated March 12, 2012, Realtime finally noted that it

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seeks to recover purported monetary benefits conveyed to Defendants in the form of supposed latency and bandwidth reduction allegedly derived from receiving market data compressed in the FAST format. Notably, Realtime's letter never mentions Defendants' trading algorithms, and such allegations by their very terms cannot support discovery of algorithms that do not compress or decompress data using the FAST protocol. If any reduction in bandwidth or latency is realized, it is done so in the process of the compressing, transmitting, or decompressing of the data (for which Defendants already have provided substantial discovery) and not by Defendants' trading algorithms that only process uncompressed data. Stated otherwise, there is simply no connection between FAST and the operation of Defendants' trading algorithms, which do not compress, decompress, or otherwise process data in the FAST protocol.

Realtime's position is simply untenable. First, as discussed above, Realtime has never alleged that Defendants' trading algorithms infringe its patents, and Realtime has failed to articulate any legitimate explanation as to how trading algorithms or any trading system that does not use FAST could possibly be relevant to this case. Next, Realtime posits an unspecified allegation that Defendants' trading algorithms receive some competitive benefit, even though they do not compress or decompress data using the FAST protocol. It is relatively easy for Realtime to spin some far-fetched theory of damages and simply demand discovery that is not likely to lead to the discovery of admissible evidence, and which would impose a significant and unwarranted burden on Defendants. But Defendants believe this Court should not countenance such tactics based on some speculative damages theory. Fed. R. Civ. P. 26(b)(1); *see Micro Motion, Inc. v. Kane Steel Co., Inc.*, 894 F.2d 1318 (Fed. Cir. 1990) (holding district court erred by permitting "speculative" discovery allegedly relevant to patent infringement "damage theories"). Realtime has not shown any nexus between any proven benefits of the FAST protocol, if any, and the operation of Defendants' trading algorithms or end-user trading systems. Accordingly, it should not be allowed to delve into Defendants' most highly prized, proprietary, and trade secret systems merely on Realtime's say-so.

On its face, Realtime's discovery is nothing more than a fishing expedition. Defendants have tried unsuccessfully to resolve this dispute with Realtime, through written correspondence and a telephonic meet and confer. Given the importance of this issue, Defendants respectfully request an informal conference with the Court to seek leave to file a motion for a narrow protective order to prevent discovery into irrelevant aspects of Defendants operations, particularly their proprietary and commercially sensitive trading algorithms and trading systems.

Respectfully submitted,



Daniel A. DeVito

cc: Counsel of Record

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# MCKOOL SMITH

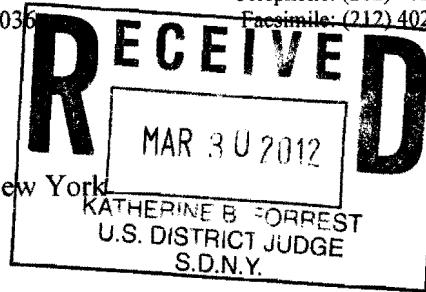
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March 29, 2012

The Honorable Katherine B. Forrest  
United States District Court for the Southern District of New York  
500 Pearl Street  
New York, New York 10007



RE: *Realtime Data, LLC v. Morgan Stanley, et al.*, Consolidated Case  
Nos. 1:11-cv-6696, -6701, -6704 (S.D.N.Y.)

Dear Judge Forrest:

Pursuant to Your Honor's Individual Practice Rule 2.F and Local Civil Rule 37.2, we write on behalf of Plaintiff Realtime Data, LLC ("Realtime") in response to Mr. DeVito's March 27, 2012 letter seeking leave to file a motion for a protective order. Realtime opposes any request for a protective order that would limit legally-recognized means of recovery for Defendants' infringement of Realtime's patents.

Damages in this case include comparing Defendants' actual trading volume and profits with what their trading volume and profits would have been but for infringement of Realtime's patents. Infringement of Realtime's patents occurs whenever a Defendant either encodes or decodes (*i.e.*, compresses or decompresses) financial market data using the FAST Protocol. Encoding with the FAST Protocol dramatically compresses financial market data, thereby greatly reducing both (i) the network bandwidth (*i.e.*, the size of the "pipe," and thus the network infrastructure and costs) necessary to distribute that market data and (ii) the amount of time it takes to distribute that data over a network or networks ("latency"), from the exchanges to the algorithmic trading systems of each Defendant, as compared to alternative compression protocols such as ZLIB.<sup>1</sup> The Defendants that Mr. DeVito represents (including Morgan Stanley, Goldman Sachs, and J.P. Morgan Chase) are banking entities whose network infrastructures receive and decode FAST-encoded financial market data from the exchanges that is then, among other things, input to each Defendant's algorithmic trading systems (including high frequency trading systems). If Defendants had not infringed by using the FAST Protocol—instead using, for example, ZLIB, or no compression at all—they would have endured significant additional latency to receive the market data that they feed into their algorithmic trading systems. Depending on the degree to which Defendants' individual algorithms are latency-sensitive, this increase in latency would have degraded the trading volume and profitability of Defendants' algorithmic trading systems. The reason is simple: algorithmic trading systems trade based on detecting differences in pricing for futures, options, equities, or other assets within an exchange or between exchanges faster than other trading systems. Indeed, in the financial industry, it is a

<sup>1</sup> See, e.g., [http://www.fixprotocol.org/documents/2049/430-530PM%20\(Grand%20Ballroom\)%20-%20FAST%20Protocol%20Demo.pdf](http://www.fixprotocol.org/documents/2049/430-530PM%20(Grand%20Ballroom)%20-%20FAST%20Protocol%20Demo.pdf)

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well-known “race to zero latency” such that any alternative that degrades latency would be disadvantaged in the marketplace. According to NYSE: “Competition in this environment is a race to zero. Whichever market can get to zero latency first, wins.” (RTD00669015 at -017.) The support for these assertions is pervasive.. For example, in 2009 a Morgan Stanley executive director stated that “Precise monitoring of latency both within our trading plant and to the exchanges is critical to optimal performance of our trading strategies.”<sup>2</sup> Goldman Sachs admits that “shav[ing] micro-seconds off of market data latency can result in millions in additional trading revenue for clients” (GS000045004 at -019).

To carry its burden to establish this measure of damages, Realtime therefore needs discovery for each Defendant’s algorithmic trading systems to demonstrate that each such trading system includes as an input market data that has been decoded using the FAST Protocol, the nature and extent to which each trading algorithm uses that market data to make trading decisions (so we would need the relevant portions of the source code for each algorithmic trading system), the latency measurements for each algorithmic trading system and each algorithm’s latency tolerance, and the associated trading volumes and profits. In seeking a protective order now to shield “their highly proprietary and commercially sensitive trading algorithms and trading systems,” Defendants conspicuously omit mention of the existing stipulated Protective Order (Dkt. No. 296; Dkt. No. 384) and its robust mechanisms—which they agreed to and insisted upon in negotiating the Protective Order—that apply here to guard against the improper disclosure of the parties’ confidential information. Because the existing Protective Order addresses Defendants’ confidentiality concerns—and not surprisingly Defendants have raised no objection on this—the remaining issue is whether Defendants’ infringing use of the FAST Protocol to deliver financial market data to their algorithmic trading systems with reduced latency is a cognizable area of damages discovery, which it is.

Mr. DeVito’s letter demonstrates an incorrect legal understanding of what is relevant in this case: Defendants are attempting to limit discovery to just infringing instrumentalities, to the exclusion of the benefits downstream that occur through use of these instrumentalities. Such a limitation disregards fundamental bases for calculating patent infringement damages. Realtime seeks “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.” 35 U.S.C. § 284. To calculate a reasonable royalty, courts for over forty years have followed the fifteen factors in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). The Federal Circuit routinely cites these factors. E.g., *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 853 n.3 (Fed. Cir. 2010). A number of these factors embrace elements that may not directly infringe (here, Defendants’ algorithmic trading systems) but which nonetheless profit from benefits (here, improvements in latency) derived from infringement of Realtime’s patents:

“6. The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.”

“9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.”

“10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.”

“11. The extent to which the infringer has made use of the invention; and any evidence probative

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<sup>2</sup> <http://www.corvil.com/pressreleases/morgan-stanley-selects-corvil-for-inter-party-low-latency-management/>

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of the value of that use.”

“13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.”

In cases like the instant case where the value of Defendants’ infringement is closely bound to noninfringing elements, the Federal Circuit authorizes the inclusion of the benefits realized by the noninfringing elements in the calculation of damages. *See, e.g., Deere & Co. v. Int'l Harvester Co.*, 710 F.2d 551, 1559 (Fed. Cir. 1983) (“In fact, the district court did nothing more or less than take into account the impact of anticipated collateral sales of an admittedly noninfringing product line . . . [w]e consider this an eminently reasonable approach to the willing seller-willing buyer analysis, particularly in this case, where the worth of the contested patent cannot be realistically divorced from the value [of the noninfringing product line].”); *Paper Converting Machine Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 22-23 (Fed. Cir. 1984) (“It is not the physical joinder or separation of the contested items that determines their inclusion in or exclusion from the compensation base, so much as their financial and market dependence of the patented item under standard marketing procedures for the goods in question.”); *Trans-World Mfg. Corp. v. Al Nyman & Sons*, 750 F.2d 1552, 1568 (Fed. Cir. 1984) (“Among the factors to be considered in determining that amount is the infringer’s anticipated profit from use of the patented invention, including ‘the effect of [using] the patented specialty in promoting sales of other products of the licensee.’ . . . By supplying the patented racks for displaying the eyeglasses, Nyman used ‘the patented [invention] in promoting sales of’ the nonpatented eyeglasses.”).

Contrary to multiple complaints in Mr. DeVito’s letter about “newly propounded discovery requests,” Realtime’s requests for discovery on Defendants’ algorithmic trading systems are not new. As far back as an April 7, 2010 document request letter, Realtime expressly requested “revenues (both gross and net), profitability, income, or other benefits realized by Defendants from trading as a result of sales, operation, or use of the Accused Instrumentalities.” Realtime’s November 5, 2010 disclosure of damages informed Defendants that “Realtime is entitled to a reasonable royalty of the revenues generated by the sales and/or use of the accused products and technology, related services (such as financial market data and financial instrument trading), and any convoyed or collateral sales of related products and services.” Realtime’s February 10, 2011 Rule 30(b)(6) deposition notices and interrogatories sought information on Defendants’ operations, including specifically algorithmic trading, using financial market data decoded with the FAST Protocol. Mr. DeVito’s letter instead refers to Realtime’s March 5, 2012 additional Rule 30(b)(6) topics that were served to remedy prior discovery deficiencies, including Defendants’ failure to properly answer related interrogatories served in E.D. Tex., based in part on S.D.N.Y. Local Civil Rule 33.3. Similarly, Realtime’s March 9, 2012 renewed request for documents to Defendants served the purpose of adapting for S.D.N.Y. practice the E.D. Tex. Discovery Order governing document production and memorializing Defendants’ prior document production obligations. And although Mr. DeVito’s letter contends that Realtime’s March 12, 2012 letter accompanying its supplemental infringement claim charts “never mentions Defendants’ trading algorithms,” Realtime’s letter states, “The value of such a reduction in latency has been estimated by one third party provider (TABB) of low latency solutions and services to be as much as \$100 mill/yr to algorithmic traders for each millisecond reduction in latency.”

At bottom, Defendants infringe Realtime’s patents by decoding FAST-encoded financial market data for their algorithmic trading systems, which indisputably receive (by Defendants’

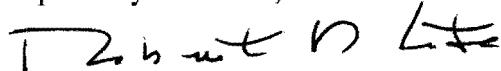
March 29, 2012

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own admissions) great benefit in the reductions in latency attributable to FAST. Realtime seeks a form of damages based on the value of that latency benefit and needs discovery on the nature and extent to which such FAST market data (directly or after decoding) is input to and used in Defendants' algorithmic trading systems in making trading decisions, and those systems' profitability, sensitivity to latency, and latency measurements. The alternative that Defendants demand—restricting damages to only the cost savings attributable to FAST in Defendants' network infrastructures, including the portions that decode FAST-encoded financial market data—is improper under the prevailing law. Thus, Defendants' request for leave to file a motion for a protective order should be denied.

Respectfully submitted,



Robert A. Cote

cc: Counsel of Record